

# **Method And Apparatus For Reconstruction Calibration Of Detector Position And Source Motion Based On A Multi-Pin Phantom**

## **Abstract of Disclosure**

Certain embodiments relate to a method and apparatus for calibrating an imaging system having an array of detector elements arranged with respect to a reference position and having an energy source moving in a pattern to irradiate the array of detector elements. The method includes initiating estimated detector positions for the array of detector elements and an estimated motion pattern for the energy source. The estimated detector positions and motion pattern are defined with respect to a reference position in the imaging system. The method further includes scanning a phantom having pins located at positions in the phantom and calculating estimated pin positions, with respect to the reference position, based on at least one of the estimated detector positions and motion pattern. The method further includes modifying at least one of the estimated detector positions and motion pattern based on at least two of the estimated detector positions, motion pattern and pin positions.

## Figures